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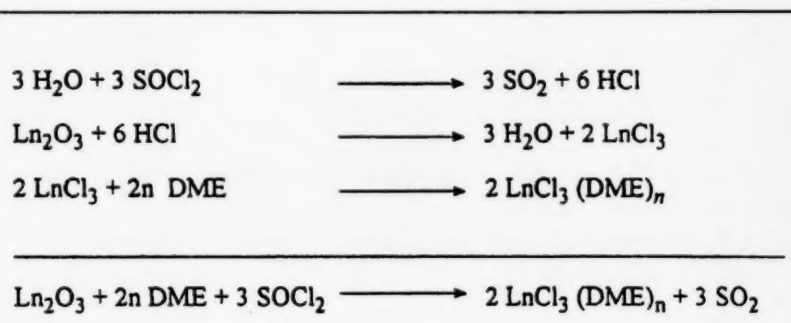


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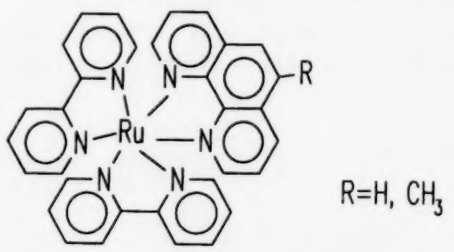


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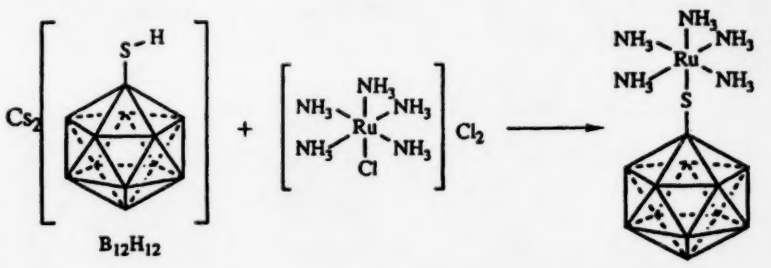


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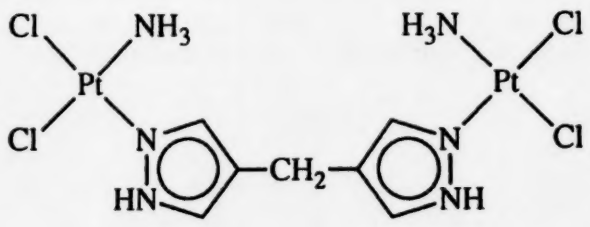

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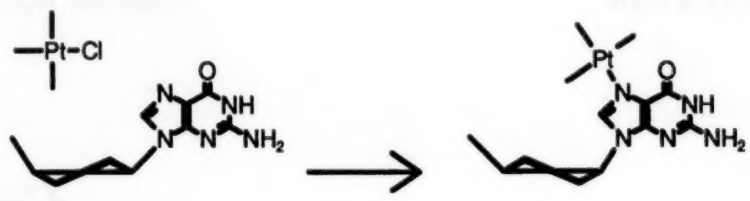
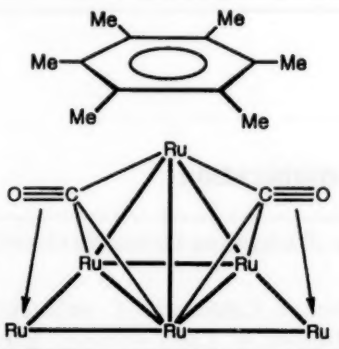
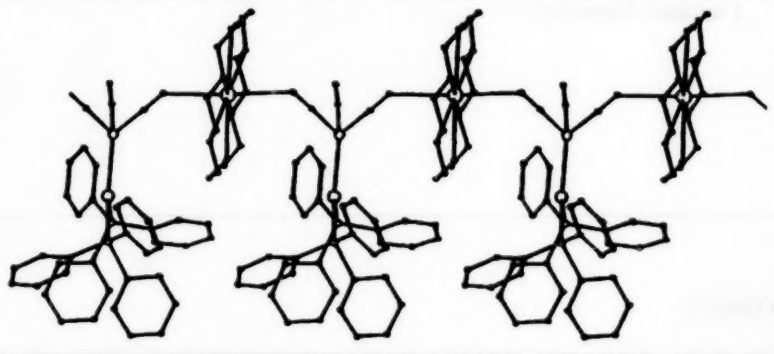
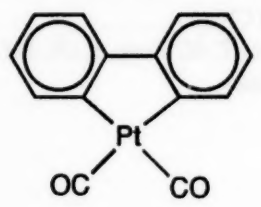
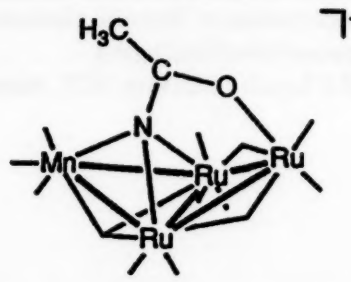
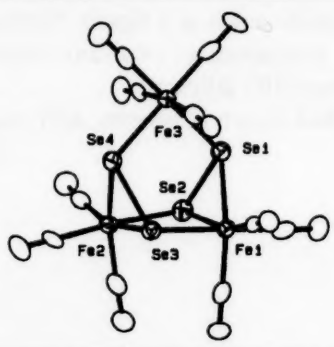
| Conformational changes in d(TpG) and 5′GTP induced by monofunctional binding of $[PtCl(NH_3)_3]Cl$ and $[PtCl(dien)]Cl$ are small ..... E.G. Talman, D.P. Myers, J. Reedijk (Leiden, Netherlands) | 25 |  |
| The preparation, characterisation and low temperature X-ray structure of $Ru_6(\eta^2\text{-}\mu_4\text{-}CO)_2(CO)_{13}(\eta^6\text{-}C_6Me_6)$ ..... A.J. Blake, P.J. Dyson, S.L. Ingham, B.F.G. Johnson, C.M. Martin (Edinburgh, UK) | 29 |  |
| The $ReH_6[P(C_6H_5)_3]_2^-$ ion as a ligand: complexes with $M(CO)_3$ fragments (M = Cr, Mo, W) ..... J.W. Freeman, A.M. Arif, R.D. Ernst (Salt Lake City, UT, USA) | 33 |  |
| Structure, physical, chemical and photophysical properties of $Pt(bph)(CO)_2$, where bph is the biphenyl dianion ..... Y. Chen, J.W. Merkert, Z. Murtaza (Charlotte, NC, USA), C. Woods (Knoxville, TN, USA), D.P. Rillema (Charlotte, NC, USA) | 41 |  |
| Mixed-metal butterfly acetamidediato clusters derived from a highly reactive ruthenium oxo cluster: synthesis and characterization of $[(PPh_3)_2N][MRu_3(CO)_{12}(\eta^2\text{-}\mu_3\text{-}NC(\mu\text{-}O)CH_3)]$, (M = Mn or Re) ..... E.J. Voss, M. Sabat, D.F. Shriver (Evanston, IL, USA) | 49 |  $[MnRu_3(CO)_{12}(\eta^2\text{-}\mu_3\text{-}NC(\mu\text{-}O)CH_3)]$ |
| The coordination chemistry of cationic main group clusters: syntheses and structures of $[Fe_3(Se_2)_2(CO)_{10}]^{2+}$ and $[Fe_4(Se_2)_3(CO)_{12}]^{2+}$ ..... G.W. Drake, G.L. Schimek, J.W. Kolis (Clemson, SC, USA) | 63 |  |

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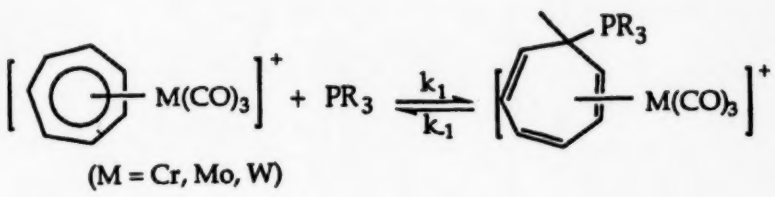


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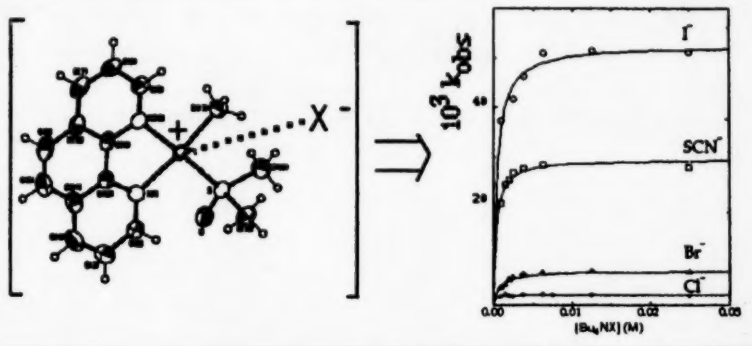


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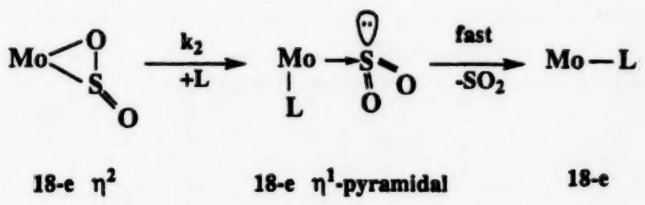


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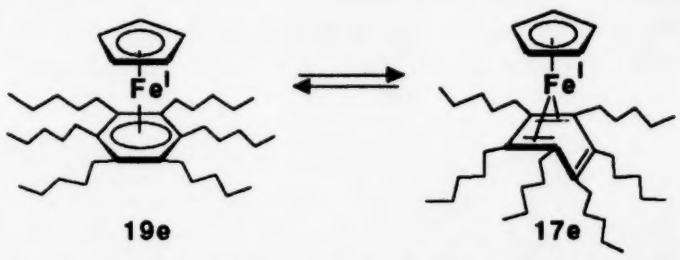


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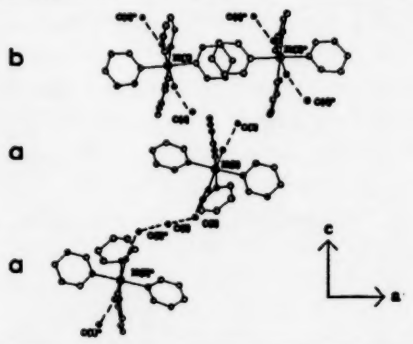

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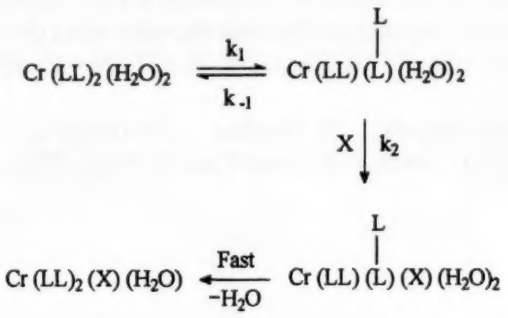
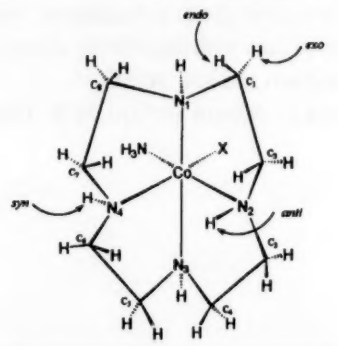
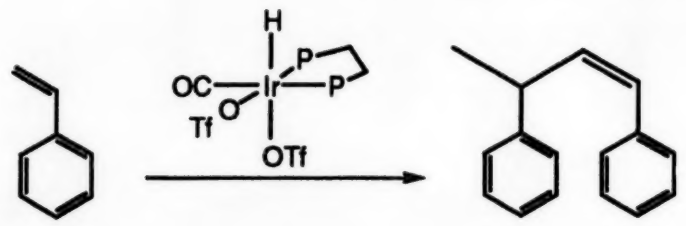
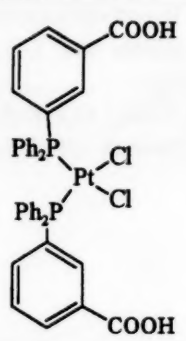
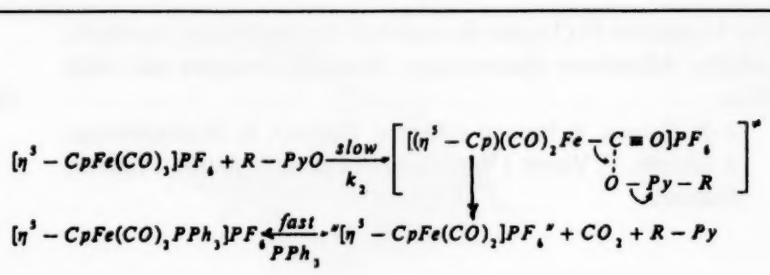
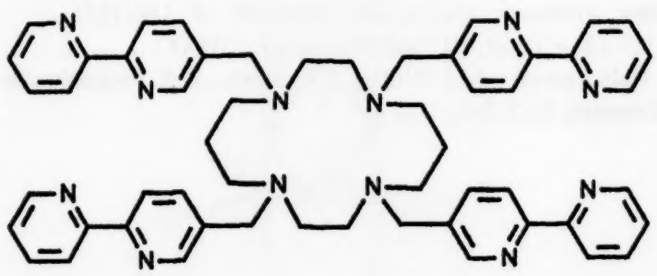
| Studies on the kinetics and mechanism of anation reactions of some six-coordinate complexes of chromium(III) in aqueous solution ... D. Banerjea, B. Chakravarti (Calcutta, India) | 117 |  |
| The stereochemistry of Co(III)–amine complexes. The use of nOe and COSY $^1$H NMR spectroscopy to determine structure in solution ... D.A. Buckingham, C.R. Clark, A.J. Rogers (Dunedin, New Zealand) | 125 |  |
| The synthesis and reactivity of electrophilic iridium(III) complexes containing bis(diphenylphosphino)ethane ... B.P. Cleary, R. Eisenberg (Rochester, NY, USA) | 135 |  |
| Synthesis and structure determination of some platinum(II) complexes with hydrophilic carboxylated tertiary phosphine ligands ... V. Ravindar (Warangal, India), H. Schumann, H. Hemling (Berlin, Germany), J. Blum (Jerusalem, Israel) | 145 |  |
| Kinetics and mechanism of CO substitution of $[\eta^5$-$CpFe(CO)_3]PF_6$ with $PPh_3$ in the presence of substituted pyridine *N*-oxide ... J. Wang, Y. Gao (Lanzhou, People's Republic of China), Q. Shi (Xian, People's Republic of China) | 153 |  |
| 1,4,8,11-Tetrakis{(2,2′-bipyridyl-5′-ylmethyl)-bis(2,2′-bipyridyl)ruthenium(II)}-1,4,8,11-tetraazacyclotetradecane ($L^1$), a macrocyclic pH and transition metal ion fluorescence sensor. Equilibrium, and stopped-flow kinetic, fluorimetric studies of the reactions of $L^1$ with nickel(II) and copper(II) ions in aqueous solution at neutral pH ... A.M. Josceanu, P. Moore, S.C. Rawle, P. Sheldon, S.M. Smith (Coventry, UK) | 159 |  |

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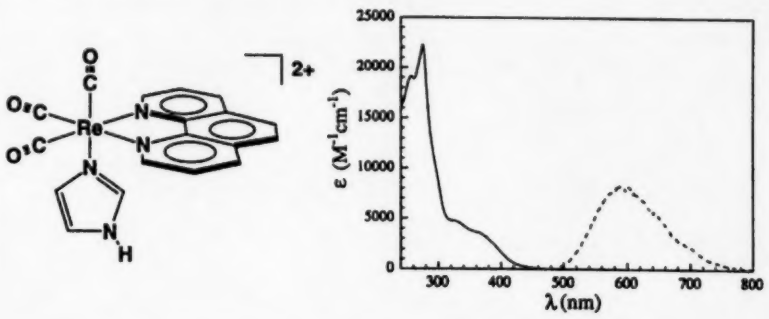


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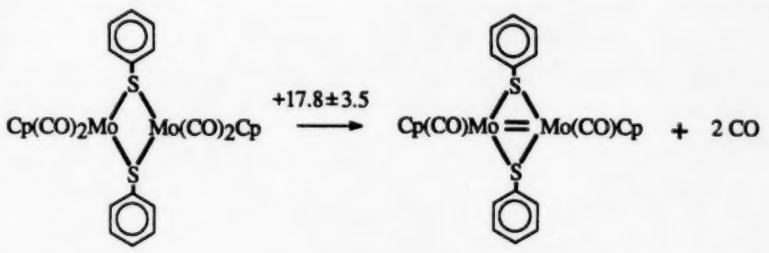


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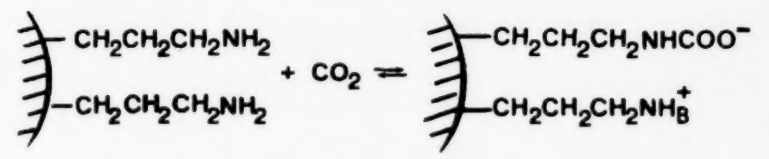


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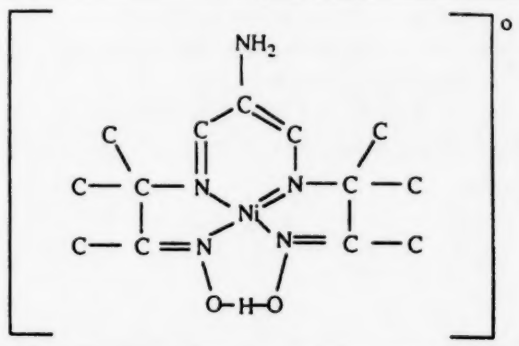


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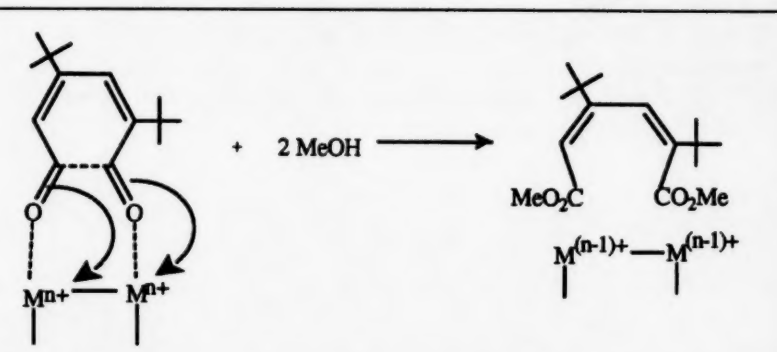


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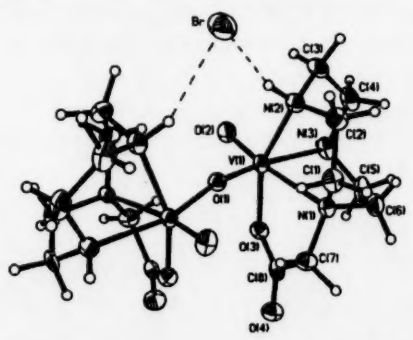

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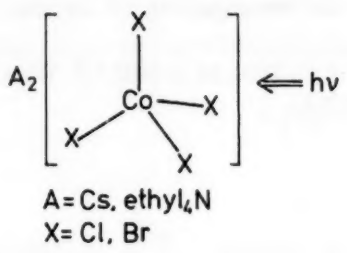


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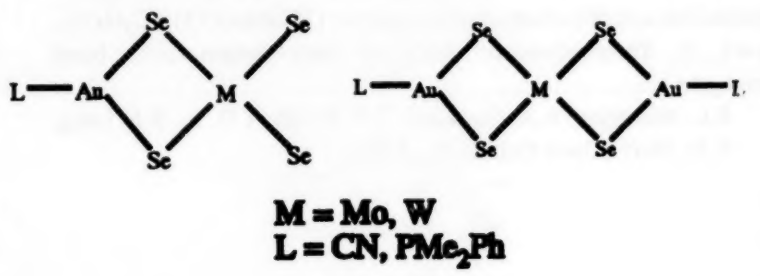


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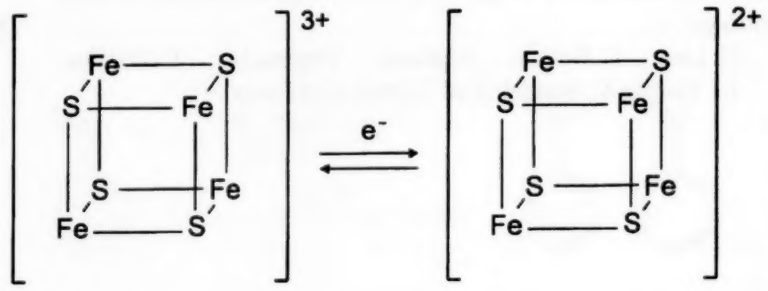


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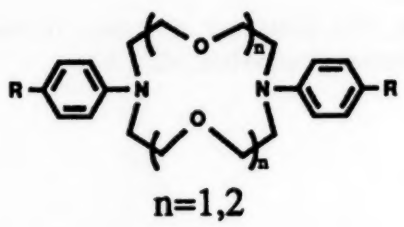


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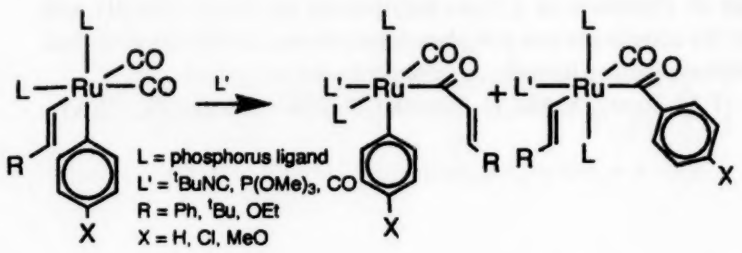


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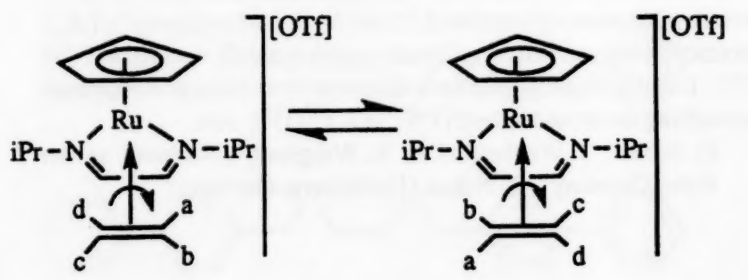

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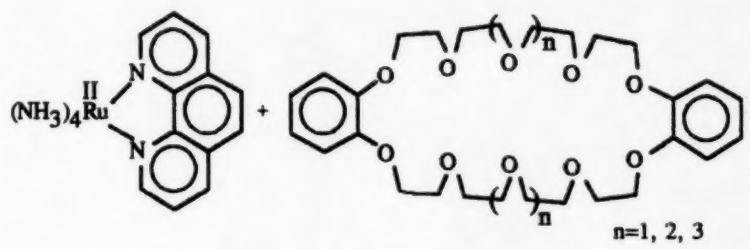


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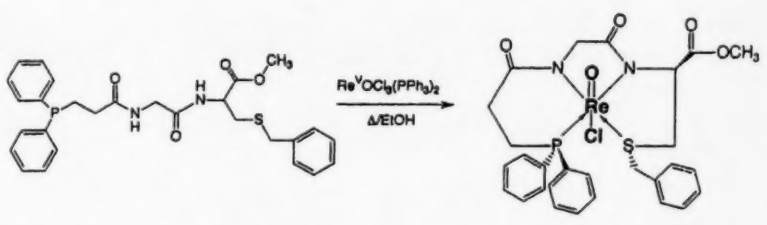


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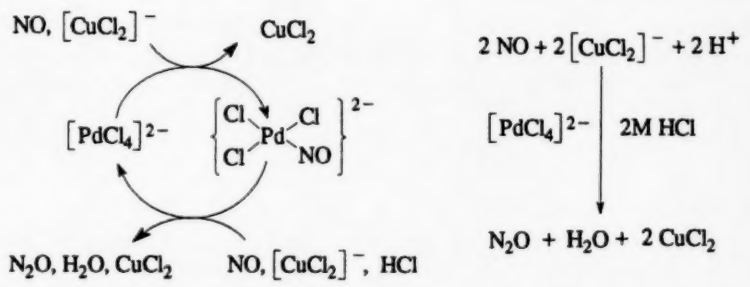


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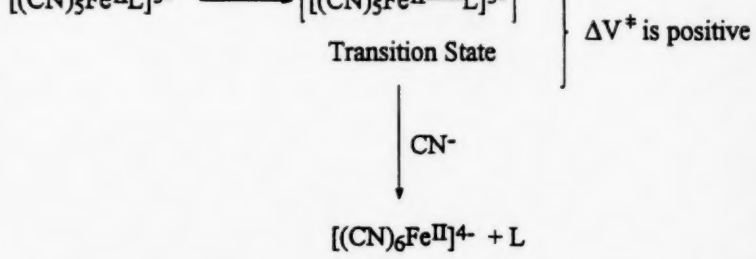


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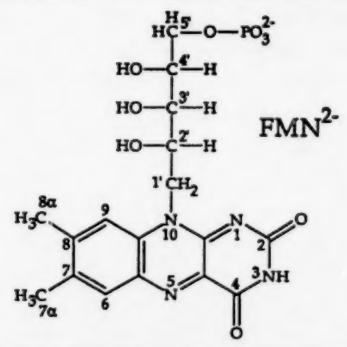


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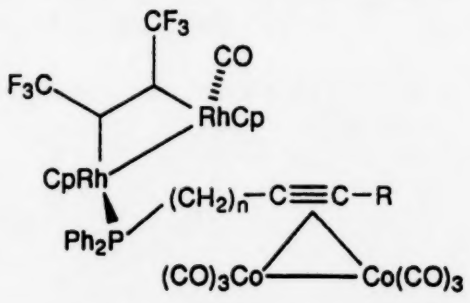

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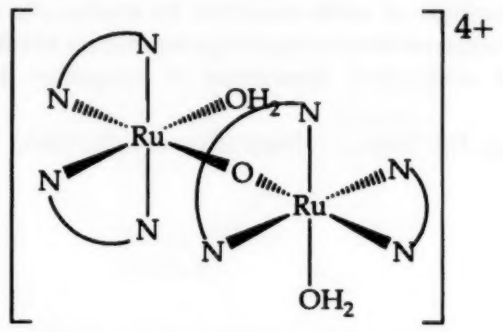
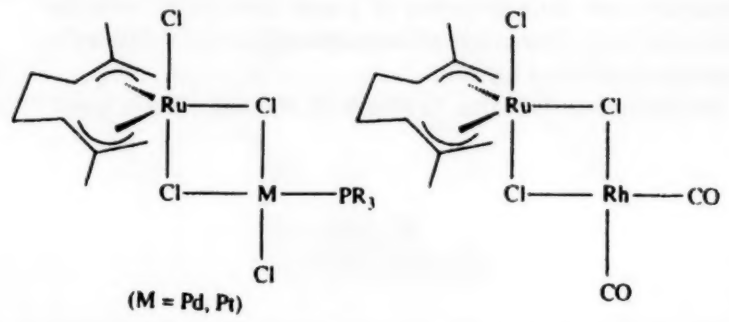
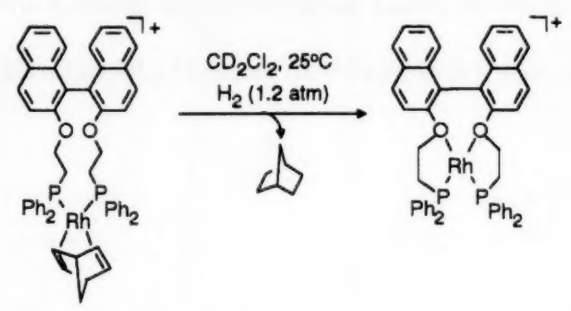
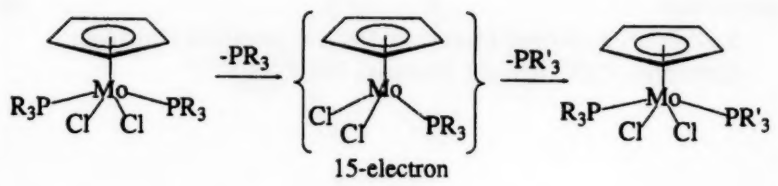
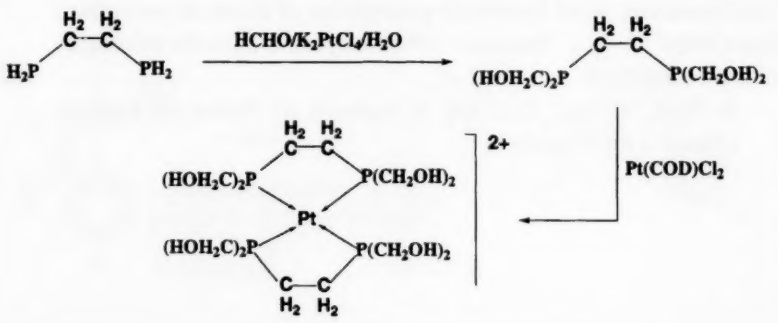
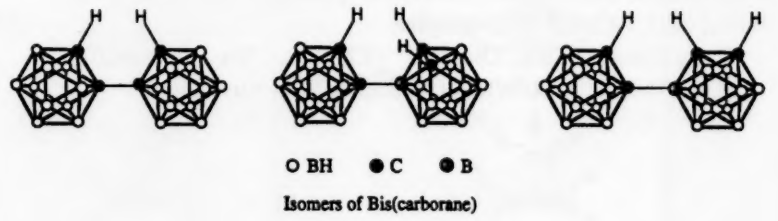
| $Mg^{2+}$-activated double-stranded DNA cleavage by $[(bpy)_2(OH_2)Ru^{III}\text{-}O\text{-}Ru^{III}(H_2O)(bpy)_2]$ ..... 335<br>N. Grover, S.A. Ciftan, H.H. Thorp (Chapel Hill, NC, USA) |  |
| Heterobimetallic chloro bridged complexes of $(\eta^3:\eta^3\text{-}C_{10}H_{16})$-ruthenium(IV) with palladium(II), platinum(II), rhodium(III), iridium(III), copper(I) and rhodium(I) ..... 339<br>K. Severin, K. Polborn, W. Beck (Munich, Germany) |  |
| Model compounds for polymeric redox-switchable hemilabile ligands ..... 347<br>T.B. Higgins, C.A. Mirkin (Evanston, IL, USA) |  |
| Dissociative phosphine exchange for cyclopentadienylmolybdenum(III) systems. Bridging the gap between Werner-like coordination chemistry and low-valent organometallic chemistry ..... 355<br>A.A. Cole, J.C. Fettinger, D.W. Keogh, R. Poli (College Park, MD, USA) |  |
| Chemistry in environmentally benign media<br>Part 1. Synthesis and characterization of 1,2-bis[bis-(hydroxymethyl)phosphino]ethane ('HMPE'). X-ray structure of $[Pt\{(HOH_2C)_2PCH_2CH_2P(CH_2OH)_2\}_2](Cl)_2$ ..... 367<br>V.S. Reddy, K.V. Katti, C.L. Barnes (Columbia, MO, USA) |  |
| The synthesis and structural characterization of carborane oligomers connected by carbon–carbon and carbon–boron bonds between icosahedra ..... 371<br>X. Yang, W. Jiang, C.B. Knobler, M.D. Mortimer, M.F. Hawthorne (Los Angeles, CA, USA) |  |

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$$Ta(CO)_5]^{3-} \xrightarrow[-H_2]{2NH_4^+} [Ta(CO)_5NH_3]^-$$

$$[Ta(CO)_5NH_3]^- \xrightarrow[-NH_3]{L,\ -60°C\ to\ +20°C} [Ta(CO)_5L]^Z$$

Z = -1, L = CNR, $PR_3$, $P(OR)_3$, $AsR_3$, $SbR_3$
Z = -2, L = $CN^-$. YIELDS: 50-80%

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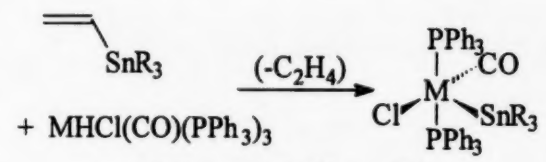


(M=Ru, Os; R=Me, *n*-Bu)

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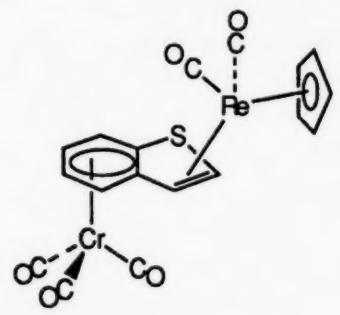


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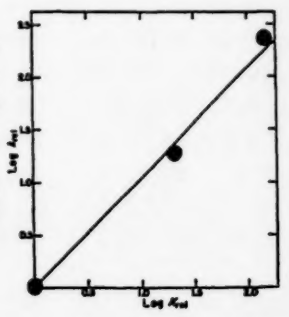

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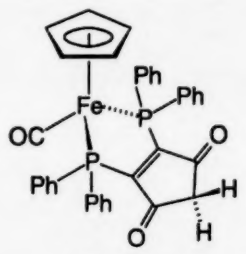


$CpFe(CO)L_2'$
an 18+δ electron complex

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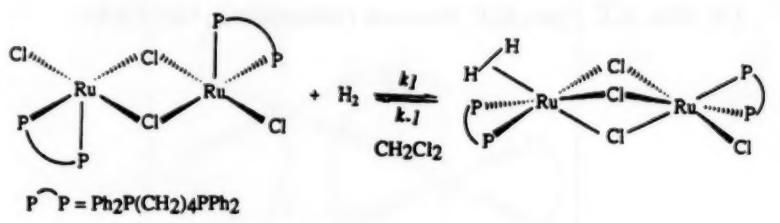
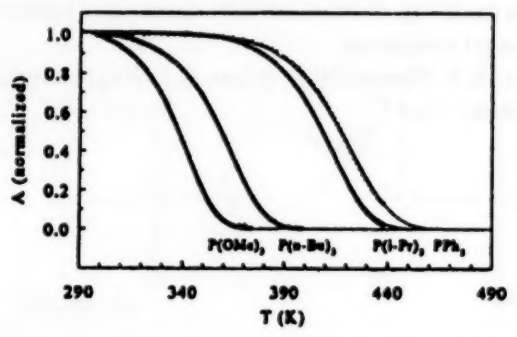
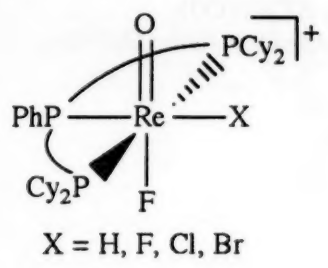
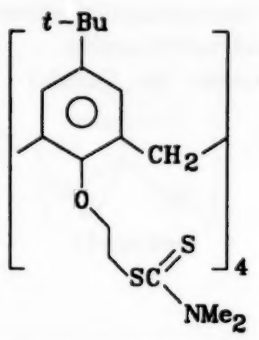
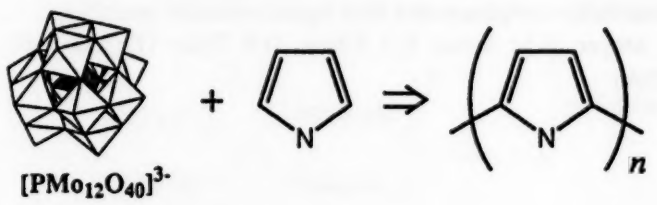
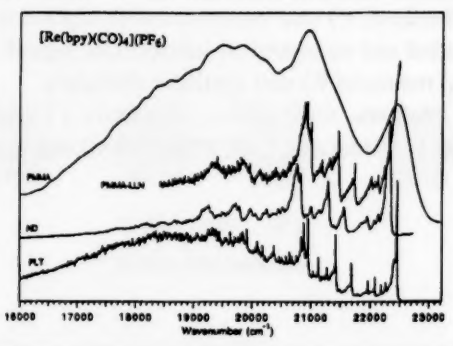
| The kinetics and energetics of formation of a molecular hydrogen complex involving a dinuclear ruthenium(II) centre ..... 419<br>D.E.K.-Y. Chau, B.R. James (Vancouver, BC, Canada) |  |
| Application of the non-isothermal approach to the kinetics of organometallic reactions: the substitution of ($\eta^5$-pentamethylcyclopentadienyl)dicarbonylrhodium(I) ..... 427<br>S. Zhang, T.L. Brown (Urbana, IL, USA) |  |
| Fluoro–hydrido–oxo and other fluoro–oxo complexes of rhenium(V) containing a triphosphine ligand ..... 435<br>D.E. Rende, Y. Kim, C.M. Beck, A. Wojcicki (Columbus, OH, USA) |  |
| Solvent extraction of divalent palladium and platinum from aqueous solutions of their chloro complexes using an *N,N*-dimethyldithiocarbamoylethoxy substituted calix[4]arene ..... 441<br>A.T. Yordanov, J.T. Mague, D.M. Roundhill (New Orleans, LA, USA) |  |
| Growth of thin processable films of poly(pyrrole) using phosphomolybdate clusters ..... 447<br>M.S. Freund, C. Karp, N.S. Lewis (Pasadena, CA, USA) |  |
| High resolution spectroscopy of the lowest excited state in $Re^I$ tetracarbonyl complexes ..... 453<br>G.F. Strouse, H.U. Güdel (Bern, Switzerland) |  |

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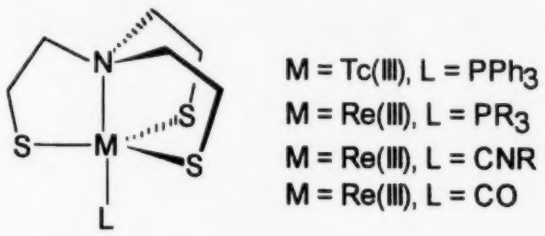


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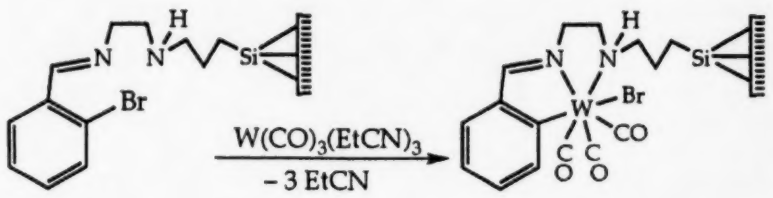


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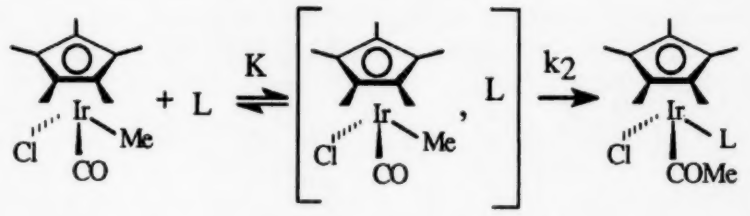


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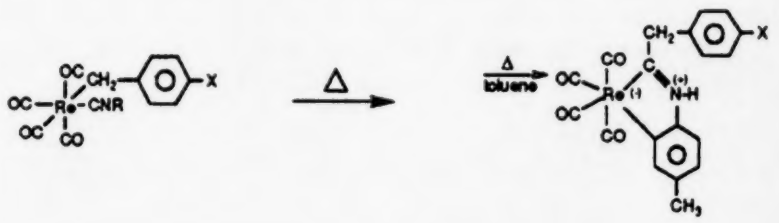


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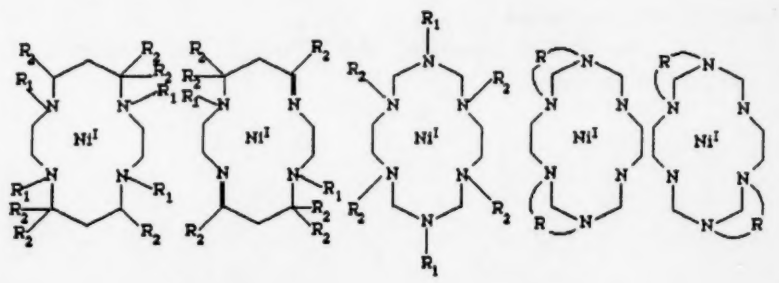


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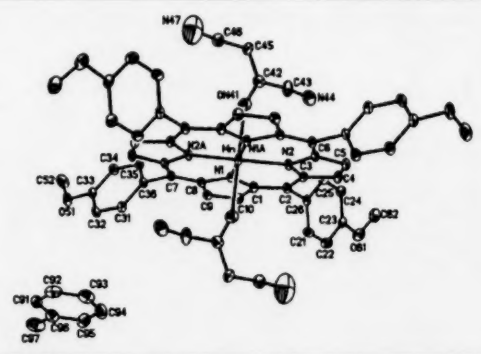

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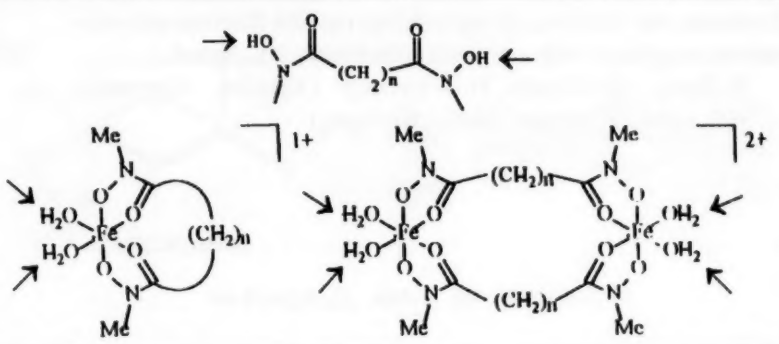
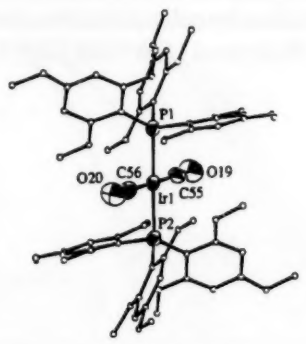
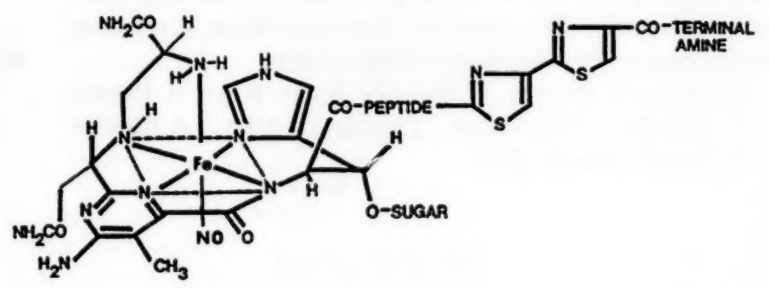
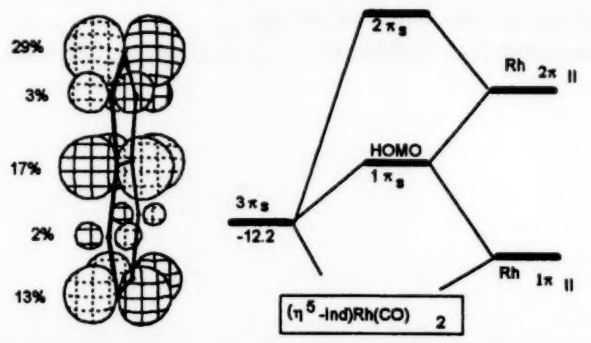
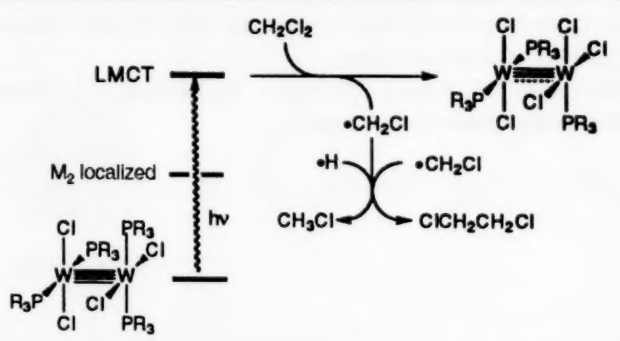
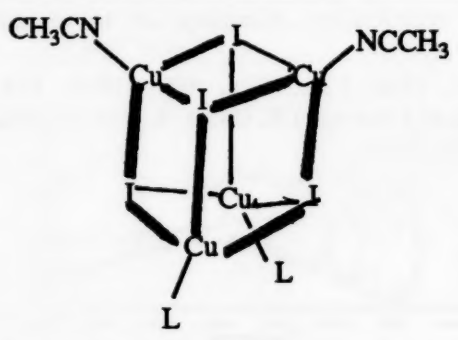
| Dihydroxamic acid complexes of iron(III): ligand p$K_a$ and coordinated water hydrolysis constants ..... M.T. Caudle, C.D. Caldwell, A.L. Crumbliss (Durham, NC, USA) | 519 |  |
| Chemistry of tris(2,4,6-trimethoxyphenyl)phosphine with rhodium(I) and iridium(I) olefin complexes ..... K.R. Dunbar, S.C. Haefner, C.E. Uzelmeier, A. Howard (East Lansing, MI, USA) | 527 |  |
| Reaction of nitric oxide with iron bleomycin bound to DNA: properties of the nitrosyl adduct and its reaction with $O_2$ ..... M.C. Kennedy, W.E. Antholine, W. Li, Q. Mao, D.H. Petering (Milwaukee, WI, USA) | 535 |  |
| Cofacial and antarafacial indenyl bimetallic isomers: a descriptive MO picture and implications for the indenyl effect on ligand substitution reactions ..... C. Bonifaci, A. Ceccon, S. Santi (Padua, Italy), C. Mealli (Florence, Italy), R.W. Zoellner (Flagstaff, AZ, USA) | 541 |  |
| Charge transfer photochemistry of quadruply bonded ditungsten halophosphine complexes ..... T.-L.C. Hsu, D.S. Engebretson, S.A. Helvoigt, D.G. Nocera (East Lansing, MI, USA) | 551 |  |
| Correlation of structure and emission in solid state copper(I) complexes; $[Cu_4I_4(CH_3CN)_2(L)_2]$, L = aniline derivative ..... G. Hu, G.J. Mains, E.M. Holt (Stillwater, OK, USA) | 559 |  |

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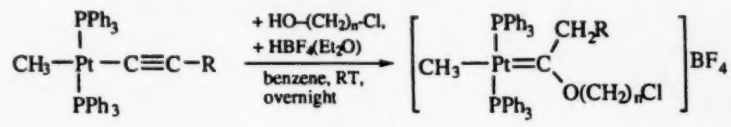


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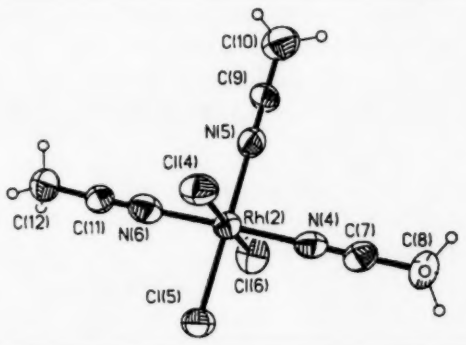


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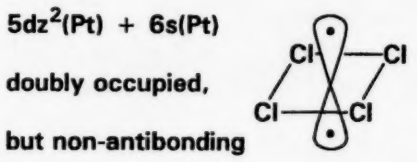


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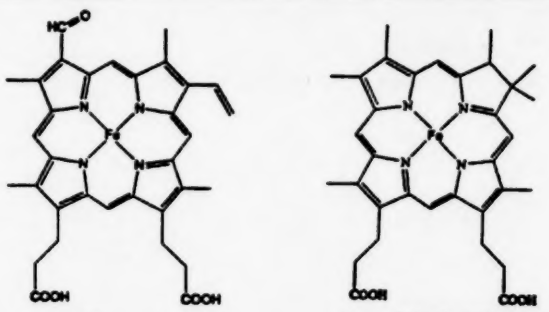


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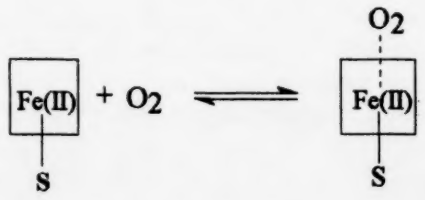

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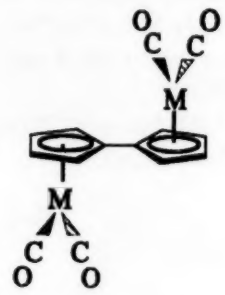
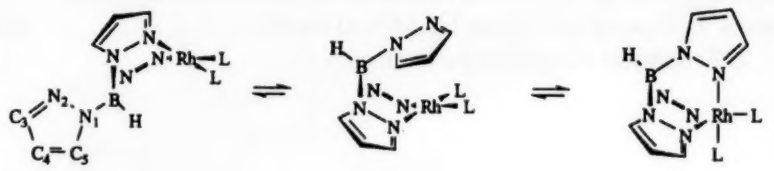
| Ligand-mediated metal–metal interactions in $(\eta^5{:}\eta^5$-fulvalene)-bis(dicarbonylcobalt) and rhodium complexes ..... 623<br>D.L. Lichtenberger, N.E. Gruhn, M.E. Rempe (Tucson, AZ, USA), W.E. Geiger, T.T. Chin (Burlington, VT, USA) |  |
| Rhodium(I) complexes of the type $[Tp^{3R,5R}Rh(LL)]$ (LL = 2CO, NBD, COD) with trifluoromethyl substituted tris(pyrazolyl)borate ligands and their dynamic behaviour in solution. The X-ray crystal structure of $Tp^{CF_3,Me}Rh(CO)_2$ ..... 631<br>E. Del Ministro, O. Renn, H. Rüegger, L.M. Venanzi, U. Burckhardt, V. Gramlich (Zurich, Switzerland) |  <br>A B C |
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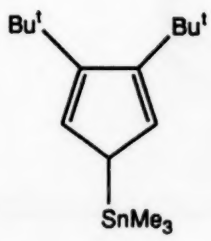
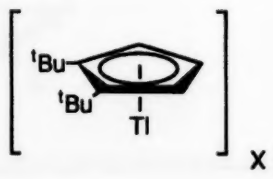
| Tin and thallium reagents for transfer of the 1,2-di-tert-butylcyclopentadienyl ligand to transition metals ..... 653<br>R.P. Hughes, J.R. Lomprey (Hanover, NH, USA) |  <br>2<br>  <br>4 |

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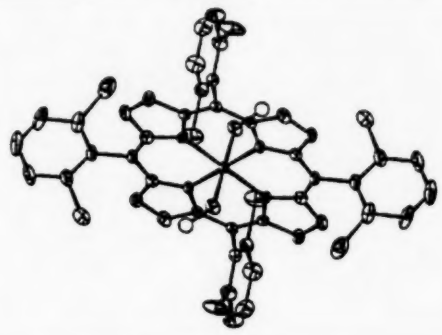
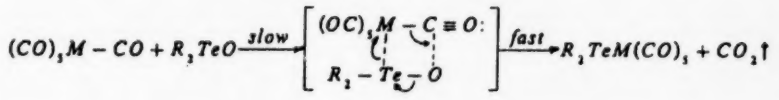
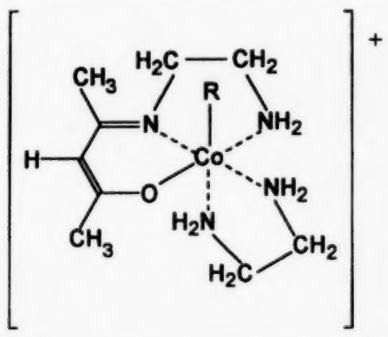
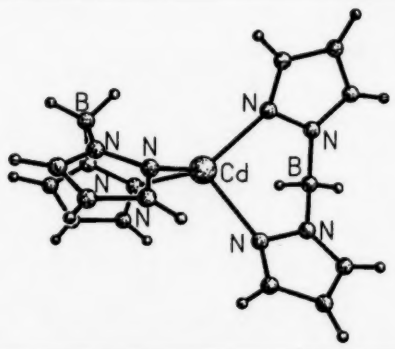
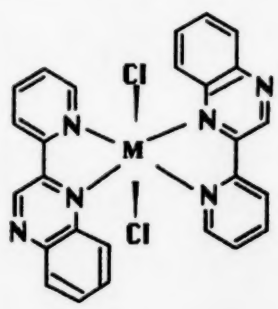
| Preparation and crystal structure of *trans*-dihydroxo-[tetrakis(2,6-dichlorophenyl)porphinato]ruthenium(IV)·2toluene ..... 657<br>P. Dubourdeaux, M. Tavarès, A. Grand, R. Ramasseul, J.-C. Marchon (Grenoble, France) |  |
| Metal carbonyls of telluroether formed by the oxygen atom transfer reaction to $M(CO)_6$ (M = Mo, W) in the presence of $(p\text{-}CH_3OC_6H_4)_2TeO$ and relative kinetic investigation ..... 661<br>Y. Gao, X. Yang (Lanzhou, People's Republic of China), Q. Shi (Xian, People's Republic of China) |  |
| Peculiar reversed-phase HPLC behaviour of cationic alkylcobalt(III) complexes holding a tridentate Schiff base ligand ..... 665<br>P.N. Nesterenko, I.Ya. Levitin, M.V. Tsikalova, M.E. Vol'pin (Moscow, Russia) |  |
| Bis[dihydrobis(1-pyrazolyl)borate]cadmium(II): a monomeric, severely distorted tetrahedral complex of cadmium(II) ..... 669<br>D.L. Reger, S.S. Mason (Columbia, SC, USA), A.L. Rheingold (Newark, DE, USA) |  |
| Synthesis and characterization of 1:2 metal complexes of the bi-heteroaromatic ligand 2-(2′-pyridyl)quinoxaline (L) and the X-ray structure of $[CuL_2](PF_6)$ ..... 673<br>A. Garoufis (Athens, Greece), S.P. Perlepes (Patra, Greece), A. Vreugdenhil, I.S. Butler (Montreal, Que., Canada), N. Hadjiliadis (Ioannina, Greece) |  **M = Ni, Cu, Cd** |

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